

# ARTHRITIS in Region 8 2009

(Kershaw, Lee, Sumter, Clarendon, Chesterfield, Marlboro,  
Darlington, Florence, Dillon, and Marion Counties)



SC DHEC Office of Chronic Disease Epidemiology and Evaluation, Arthritis Prevention and Control Program and BRFSS

## Risk Factors

- Arthritis comes from the Greek words arth meaning joint and itis meaning inflammation. The term is used as to refer to more than 100 different forms of rheumatic diseases and conditions that affect the joints, connective tissues or supporting structures of the body. In some conditions, internal organs are affected. Examples of these diseases and conditions include osteoarthritis, rheumatoid arthritis, fibromyalgia, lupus, juvenile arthritis, and gout. Of these diseases, osteoarthritis is the most common.[1]
- An individual living with arthritis may experience both physical and mental effects. Without appropriate management, loss of function, disability, and depression can result. Common symptoms of arthritis include pain, stiffness, swelling in and around the joint and difficulty moving a joint.
- Genetics: Certain genes are known to be associated with a higher risk of some types of arthritis.[1]
- Obesity: Gout in men and osteoarthritis of hand, hip and knee in women are associated with obesity.[7]
- Joint injuries: Some occupations like farming, heavy industry, and those occupations with repetitive motion are associated with arthritis. Sports injuries and work related injuries can increase the risk of arthritis.[8]
- Physical activity: Physical activity can help reduce the impact of the symptoms of arthritis.
- Table 1 displays the prevalence of major behavioral risk factors for arthritis and its complications in Region 8, SC, and the US in 2009.

## Why is Arthritis a Public Health Problem?

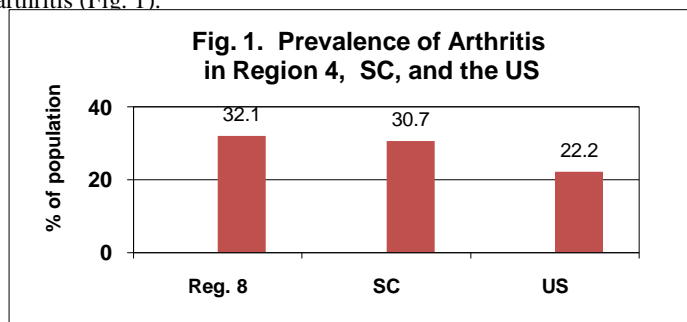
- Doctor diagnosed arthritis affects nearly 50 million people in the United States making it one of our most common diseases. [2]
- As the population ages, this number will increase dramatically.[3]
- Arthritis is the leading cause of disability among U.S. adults, limiting everyday activities for 21 million Americans.[2]
- Each year, arthritis results in 992,100 hospitalizations and 44 million outpatient visits nationally.[4]
- Arthritis and other rheumatic conditions cost the United States approximately 127.8 billion dollars in 2003 for medical costs and lost wages.[5]
- South Carolina had a statewide prevalence of 30.7% in 2009. It was the 7th highest prevalence rate in the nation.
- Almost 60% of arthritis cases are women and almost 60% of the elderly population has arthritis. Risk increases with age.[6]

Table 1. Prevalence of (%) Behavior Risk Factors for Arthritis  
BRFSS 2009

	Region 8	SC	US
Overweight and Obese	65.6	65.9	63.1
Physical Inactivity	22.5	26.2	23.8

## South Carolina Prevalence

- In 2009, approximately 32.1% of adults aged 18 and older living in Region 8 had been told by a doctor some time in their life that they had arthritis (Fig. 1).



- Arthritis affects people of all ages and all racial groups. The prevalence of arthritis is higher among women, people 65 and older, and those with less education.

- The Arthritis Foundation Self Help Program (formerly ASHC) has proven to reduce arthritis-related pain by 20% and decrease physician visits by 40%. This course involves small group education with a focus on problem solving, exercise, relaxation and communication. [9]

- Physical activity in the form of regular, moderate exercise maintains joint health, relieves symptoms, improves functions, reduces joint swelling, increases pain threshold, and improves energy levels.[1] Several effective physical activity programs are available for people with arthritis. These programs include the Arthritis Foundation Exercise Program (formerly PACE) which has been proven to improve self-efficacy in participants[10], and the Arthritis Foundation Aquatic Program. [1]
- A 10% reduction of body weight has been shown to improve symptoms such as pain, stiffness and function by 28% [11]. Physical activity and a low fat diet are key to weight management.[1]

Physical and occupational therapy can help impairments and activity limitations.[1]

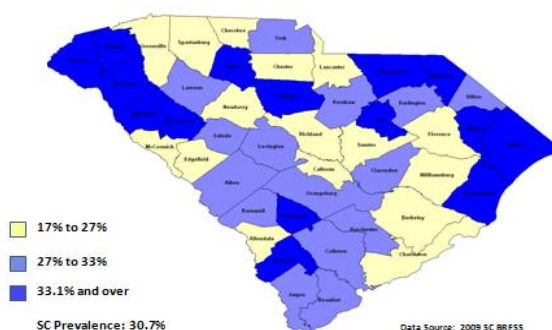
- Medications for some types of arthritis can limit disease progression, control symptoms and prevent serious complications.[1]

- Joint replacement therapy often reduces pain and improves activity.[1]

<b>Table 2. Prevalence of Arthritis and Activity Limitation Attributable to Arthritis in Adults by Selected Characteristics, 2009 Region 8</b>		
<b>Characteristics</b>	<b>Diagnosed Arthritis</b>	<b>Activity Limitation</b>
<b>Total</b>	32.1	44.9
<b>Gender</b>		
Male	30.4	42.6
Female	33.7	46.9
<b>Age (years)</b>		
18-44	15.5	40.4
45-64	39.4	49.1
≥ 65	53.1	43.0
<b>Race/Ethnicity</b>		
NH White,	34.2	39.7
NH Black,	23.0	52.6
<b>Education (years)</b>		
Less than High School Graduate	39.1	51.4
High School Graduate	31.5	48.3
More than High School	31.0	41.9
<b>SC BRFSS, 2009, Numbers in percent</b>		

- Physical activity decreases pain, improves function, and delays disability. Maintaining a healthy weight and avoiding joint injuries reduce the risk of developing arthritis and diminish disease impact. Early diagnosis and appropriate management, including self-management, are key factors to maintaining quality of life for people with arthritis.

**Fig. 2. Arthritis Prevalence by County 2009**



## Arthritis Resources

Arthritis Program

DHEC Bureau of Community Health and Chronic Disease Prevention

<http://www.dhec.sc.gov/health/chcdp/arthritis/>

803-898-0760, or 803-868-0404.

Arthritis Foundation, Carolinas Chapter

[www.arthritis.org](http://www.arthritis.org), 704-529-5166



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[http://www.scdhec.gov/hs/epidata/state\\_reports.htm](http://www.scdhec.gov/hs/epidata/state_reports.htm)

References: [1]Arthritis Foundation.Association of State and Territorial Health Officials, Centers for Disease Control and Prevention. National Arthritis Action Plan: A Public Health Strategy. Atlanta, GA. Arthritis Foundation.1999. [2] [http://www.cdc.gov/arthritis/data\\_statistics.htm](http://www.cdc.gov/arthritis/data_statistics.htm). [3] Hootman, JM, CG Helmick. Projections of US prevalence of arthritis and associated activity limitations. Arthritis Rheum. 2006; 54:226-9. [4] Arthritis, Meeting the Challenge, At a Glance, 2009. National Center for Chronic Disease Prevention and Health Promotion. Centers for Disease Prevention and Control, <http://www.cdc.gov/nccdphp/publications/AAG/pdf/arthritis.pdf>. [5] Yelin, PhD, M Cisternas MA, Foreman A, MA, et al. National and State Medical Expenditures and Lost Earnings Attributable to Arthritis and Other Rheumatic Conditions—United States, 2003. MMWR 2007; 56(01):4-7.. [6] CDC. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2003–2007. MMWR 2006;55: 1089–92. [7] Oliveria SA, DR Felson, PA Cirillo, et al Body weight, body massindex and incident symptomatic osteoarthritis of the hand, hip and knee. Epidemiology 1999; 10:161-6. [8] Felson DT, MT Hannan, A Naimark, et al. Occupational physical demands, knee bending and knee osteoarthritis: results from the Farmingham Study. J Rheumatol 199; 18: 1587-92. [9].Brady TJ, J Kruger CG Helmick, et al. Intervention Programs for Arthritis and Other Rheumatic Diseases. Health Education and behavior 2003; 30(1):44-63. [10] Schoster B, LF Callahan, A Meier et al. The People with Arthritis Can Exercise (PACE) program: a qualitative evaluation of participant satisfaction. Prev. Chronic Dis. 2007; 2(3): All. [11].Christensen R A Astug and H Biddal. Weight loss: the treatment of knee osteoarthritis. Osteoarthritis Cartilage 2007; 13(1): 20-7.